THE NAUTILUS

A NEW RACE OF POLYGYRA APPRESSA FROM ILLINOIS

BY FRANK C. BAKER¹

POLYGYRA APPRESSA FOSTERI, nov. var.—Shell differing from typical *appressa* in having the sculpture coarser and more rib-like, the parietal tooth somewhat heavier and often larger, and the outer lip with a distinct superior denticle, giving the aperture a form like that of *Polygyra palliata*. The periphery is also obscurely subangulated. Sculpture between the riblets like that of typical *appressa*.

Greater diameter 16.5; Lesser diam. 15.0; Height 9.5 mm. Holotype.

Greater diameter 16.5; Lesser diam. 15.0; Height 10.0 mm. Paratype.

Greater diameter 14.0; Lesser diam. 13.0; Height 8.0 mm. Paratype.

Type locality: Hardin Co., Ill., 3 miles N.W. of Elizabethtown, in valley of Big Creek. Holotype, No. Z32079; paratypes, No. Z23280 Museum of Natural History; paratypes, No. 157437 Academy of Natural Sciences of Philadelphia.

This race of *appressa* appears to be very constant in a species noteworthy for its variation. The typical form might easily be taken at first sight for a small form of *Polygyra palliata* with the hairy surface polished. In the type locality 80 specimens were obtained, and only five were without a strong upper denticle on the lip. The rib sculpture of the surface is like that of *Polygyra appressa linguifera* (Fér.), (*sculptior* Chadwick), but there are no spiral lines as in that race, which also lacks the tridentate form of aperture. The sculpture of *fosteri* between the rib-striae is like that of *P. appressa appressa*.

P. a. fosteri is the common form of *appressa* in Illinois where it is found on the limestone bluffs bordering the Ohio and Mississippi rivers, and in the hilly region of southern Illinois. *P. appressa appressa* is very rare in Illinois, only about a dozen specimens having been found during a season's collection by two men of experience. Upward of 1,000 speci-

¹ Contribution from the Museum of Natural History, University of Illinois, No. 67, and the Illinois State Natural History Survey, in coöperation.

mens of the *fosteri* race have been collected and the variation toward typical *appressa* is only about five per cent. In the type locality the specimens were found under heavy blocks of limestone in gullies and hillsides.

What the distribution of the new race may be is not at present apparent from the material in the collection of the museum. The typical form is represented by some 25 lots ranging from Iowa to Alabama and Georgia. In Illinois the race *fosteri* has been collected along the Ohio from Shawneetown to Cairo and on the Mississippi from Burlington, Iowa to Cairo. It was also found in Calhoun Co. in both the Illinois and the Mississippi valleys. How far north it may extend in the state is not known. Its distribution outside Illinois is unknown. It occurs in Iowa in the Mississippi valley and probably southward in Missouri. It should be found on the Indiana side of the Wabash River and on the Kentucky side of the Ohio River.

The specific name is given in recognition of the efficient work of Mr. Thural Dale Foster, a graduate student in zoology in the University of Illinois, my assistant in the molluscan survey of Illinois now being conducted by the Illinois State Natural History Survey. This organization has deposited its entire collection of land Mollusca in the museum of the University of Illinois to form the basis for a manual of the land mollusks of Illinois.

NEW WEST AMERICAN SPECIES OF BULIMULUS AND NASSA

BY H. A. PILSBRY AND H. N. LOWE

BULIMULUS SANMARCOSENSIS, n. sp. Pl. 5, fig. 1.

San Marcos Island, Gulf of California. Type 158976 ANSP., collected by H. N. Lowe, January, 1932. Paratypes in Lowe collection.

A species related to *B. lamellifer;* oblong-conic, glossy, of $6\frac{1}{2}$ convex whorls, the initial half whorl smooth, next whorl delicately costulate, subsequent whorls with weak growth